

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1-21. (Canceled)

22. (New) A method of describing a multiple level digest segment information scheme for multimedia contents in order to provide multiple levels of digest streams for each multimedia content, the method comprising:

describing level information of digest segments using multiple levels in a content-based data area of the multimedia stream;

describing the level information and time range information of each digest segment in a digest segment information structure; and

describing a digest segment information scheme with a set of digest segment information structures, wherein a digest level running time information or a digest stream running time information is added to the digest segment information scheme, wherein the digest level running time information is information about a sum of running time of digest segment information structures of the same digest level described according to digest levels, and the running time information of the digest stream is a running time information of a possible digest stream.

23. (New) A method of describing a multiple level digest segment information scheme for multimedia content in order to provide multiple levels of digest streams for each multimedia content, the method comprising:

describing level information of digest segments in digest level headers using multiple levels in a content-based data area of a multimedia stream;

describing time range information of the digest segments in a digest segment information structure;

describing a digest level running time information or a digest stream running time information, wherein the digest level running time information is information about a sum of running time of digest segment information structures of the same digest level described according to digest levels, and the running time information of the digest stream is a running time information of a possible digest stream; and

describing a digest stream information scheme with a set of digest level headers, each of which has a set of digest segment information structures with the same digest level.

24. (New) The method of claim 23, wherein the time range information is a start point and an end point, or a start point and duration of the digest segment.

25. (New) The method of claim 23, further comprising arranging the digest level headers in order of importance (level) in order to construct a digest stream using a multi level digest segment information scheme.

26. (New) The method of claim 23, further comprising arranging the digest level segment information structures in order of their time range information in order to construct a digest stream using a multi level digest segment information scheme.

27. (New) A method of generating multiple levels of digest streams for multimedia contents, comprising:

detecting digest level and time range information of digest segment information structures using a multiple level digest stream information scheme contained in a content-based data area of the multimedia stream; and

when a condition is queried by the user, generating a multiple level digest stream by arranging the digest segments with a priority of more than a certain level corresponding to the condition in a time sequence, wherein a digest level running time information or a digest stream running time information can be used to find a matched level of digest stream with a user's input, wherein the digest level running time information is information about a sum of running time of digest segment information structures of the same digest level described according to

digest levels, and the running time information of the digest stream is a running time information of a possible digest stream.

28. (New) The method of claim 27, wherein a parity check is performed by comparing a total running time of a plurality of digest segments of the same digest level with a digest level running time of that digest level.

29. (New) The method of claim 27, wherein a parity check is performed by comparing a total running time of digest segment information structures having a digest level less than or equal to a particular level among a plurality of digest segments with the digest stream running time of that digest level.

30. (New) An apparatus for generating a multiple level digest stream of a multimedia steam, comprising:

a user input unit;
a digest stream level determining unit configured to determine and output a digest level of a digest stream corresponding to a condition queried by the user input unit, upon receipt of a multimedia stream signal; and
a decoder configured to decode digest segments of the above digest level from the multimedia stream signal, wherein the digest stream level determining unit comprises:

a multiple level digest segment information scheme analyzing unit configured to compute a running time of each digest stream, by analyzing a multiple level digest segment information scheme contained in a content-based data of the multimedia stream signal; and

a digest stream information display unit configured to select and query a running time of a plurality of running times by a user, by displaying the running times by computed digest stream.

31. (New) An apparatus for generating a multiple level digest stream of a multimedia stream, comprising:

a user input unit;
a digest stream level determining unit configured to determine and output a digest level of a digest stream corresponding to a condition queried by the user input unit, upon receipt of a multimedia stream signal; and

a decoder configured to decode digest segments of the above digest level from the multimedia stream signal, wherein the digest stream level determining unit comprises:

a multiple level digest segment information scheme analyzing unit configured to compute a running time of each digest stream, by analyzing a multiple level digest segment information scheme contained in a content-based data of the multimedia stream signal; and

a digest level determining unit configured to output a digest level of a digest stream corresponding to a running time most close to the queried running time, upon receipt of the above running time.

32. (New) The apparatus of claim 31, wherein the digest level determining unit compares the running time queried by the user with the running time and/or additional information, including at least one of an occurrence of events, an appearance of at least one of persons, backgrounds, or objects, or situation information about at least one of events, persons, objects, or backgrounds, of digest stream and digest segment information structures, selects a running time most close to the queried running time, and outputs a digest level of the digest stream with the selected running time and/or the additional information to the decoder.